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| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | RHEE, JANE J | |
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VOLKER HENNINGE,
CHRISTIAN HYING, and GERHARD HORPEL

Appeal 2009-011170
Application 10/524,143
Technology Center 1700

Decided: January 29, 2010

Before BRADLEY R. GARRIS, CHARLES F. WARREN, and
TERRY J. OWENS, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 1-12, 24, and 25 in the Office Action mailed April 14, 2008. 35 U.S.C. §§ 6 and 134(a) (2002); 37 C.F.R. § 41.31(a) (2008).

An oral hearing was held January 21, 2010.

We reverse the decision of the Primary Examiner.

Claim 1 illustrates Appellants' invention of a separator, and is representative of the claims on appeal:

1. A separator, comprising a flexible nonwoven having a porous inorganic coating on and in said nonwoven, and wherein the material of said nonwoven is selected from nonwoven, nonelectroconductive polymeric fibers, and wherein said nonwoven has a thickness of less than 30 μm , a porosity of more than 50% and a pore radius distribution, in which at least 50% of the pores have a pore radius from 75 to 150 μm .

The Examiner relies upon the evidence in these references (Ans. 2-3):

| | | |
|------|----------------|---------------|
| Kung | 5389,471 | Feb. 14, 1995 |
| Yen | 6,495,292 B1 | Dec. 17, 2002 |
| Omae | JP 10-326607 A | Dec. 8, 1998 |

Appellants request review of the following grounds of rejection advanced on appeal by the Examiner (App. Br. 2-3):

claims 1-6, 9-12, 24, and 25 under 35 U.S.C. § 103(a) over Yen in view of Omae (Ans. 4);

claims 7 and 8 under 35 U.S.C. § 103(a) over Yen in view of Omae and further in view of Kung (Ans. 6); and

claims 1-12, 24, and 25 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of co-pending Application 10/504,144¹ in view of Omae (Ans. 3).

Opinion

Claims 1 and 7: § 103(a)

The dispositive issue entails the interpretation of the claim language “inorganic coating” of representative independent claim 1 and dependent claim 7 by giving this term the broadest reasonable interpretation in its

¹ We refer to Application 10/504,144 herein as the ‘144 Application.

ordinary usage in context as it would be understood by one of ordinary skill in the art in light of the written description in the Specification. *See, e.g., In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1378-79 (Fed. Cir. 2007); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004), and cases cited therein; *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).

On this record, we agree with Appellants that the claim term “inorganic coating” necessarily means that the coating must be entirely “inorganic.” App. Br., e.g., 4 and 6. We find no basis in the language of the appealed claims or in the Specification to interpret this term as including “organic” ingredients. *See Spec.*, e.g., 12-13, 15, and 16.

We further agree with Appellants that in disclosing a polymeric encapsulation sheath as a coating around the fibers of the nonwoven of the disclosed separator, Yen describes to one of ordinary skill in this art an “organic” coating on and in the nonwoven even though the polymeric encapsulation sheath can contain inorganic fillers. App. Br. 4-6. Yen, e.g., col. 1, ll. 61-67; and col. 2, ll. 25-32 and 48-56. Indeed, in view of the necessary polymeric component in Yen’s encapsulation sheath, we cannot subscribe to the Examiner’s position that “the inorganic fillers itself is considered the inorganic coating.” Ans. 8; *see* Reply Br. 1-2.

On this record, the Examiner has not adduced scientific reasoning or evidence establishing that one of ordinary skill in this art would have modified Yen’s separators by interchanging an “inorganic” coating for Yen’s “organic coating” to obtain a separator having an inorganic coating on and in a nonwoven as claimed in claims 1 and 7. We find that Omae discloses an “organic” coating. Omae ¶ 0006.

Thus, we agree with Appellants that the Examiner has not established that the combined teachings of Yen and Omae alone and as further combined with Kung provide the factual foundation for a conclusion of prima facie obviousness under § 103(a). App. Br. 6 and 8. *See, e.g., In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967).

Accordingly, in the absence of a prima facie case of obviousness, we reverse the grounds of rejection of the appealed claims under 35 U.S.C. § 103(a).

Claim 1: Judicially Created Doctrine Of
Obviousness-Type Double Patenting

We find representative independent claim 1 of the ‘144 Application specifies a “separator comprising a flexible substrate . . . having a multiplicity of openings and having a porous ceramic coating on and in said substrate,” wherein the “substrate” can be “non-woven . . . and has a porosity of more than 50%.” We determine there is no claim limitation in claim 1 of the ‘144 Application specifying the “nonwoven has . . . a pore radius distribution, in which at least 50% of the pores have a pore radius from 75 to 150 μm ” as required by appealed claim 1. App. Br. 9. Indeed, the Examiner points to no disclosure in the Specification of the ‘144 Application which describes the pore radius distribution of a separator falling within claim 1 of the ‘144 Application, and we find none. *See Spec.*, e.g., 6:1 to 7:8, and 8:14-25.

On this record, we agree with Appellants that one of ordinary skill in this art would not have been led by any limitation of the “inorganic” ceramic coated separators in claims 1-12 of the ‘144 Application to the disclosure of

a limitation of a maximum diameter range size range for an “organic” coated separator in Omae, which organic separator has no resemblance to the claimed “inorganic” ceramic coated separator encompassed by claims 1-12 of the ‘144 Application. App. Br. 9; Omae ¶ 0006. Thus, on this record, we determine that one of ordinary skill in this art would not have arrived at the claimed “inorganic” coated separator encompassed by appealed claims 1-12, 24, and 25. The Examiner does not contend otherwise as Appellants point out. App. Br. 10; Reply Br. 3; Ans. 11.

Accordingly, in the absence of a prima facie case of provisional obviousness-type double patenting, we reverse the ground of rejection of the appealed claims under this judicially created doctrine.

The Primary Examiner’s decision is reversed.

REVERSED

kmm

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